SUMMARY

A. PURPOSE OF AND NEED FOR THE ACTION

The purpose of the proposed action is to provide an access-controlled four-lane facility that will allow for the continuation of US 67, US 136, and proposed Illinois 336 around the City of Macomb. The highway will also link east-west roads, existing US 136 and proposed Illinois 336 to US 67. US 67 currently extends in a north-south direction throughout the western portion of the state, from Alton to the Quad Cities. The proposed highway will reduce congestion in and around Macomb, increase safety for city traffic by establishing a through-traffic alternative (bypass), reduce travel times for local and regional drivers, and support the city's economic development goals.

This Draft Environmental Impact Statement has been prepared to fulfill the requirements of the National Environmental Policy Act and to provide information for federal actions by the Federal Highway Administration and the US Army Corps of Engineers. These actions are, respectively, issuance of a Record of Decision for the Macomb Area Study and issuance of a Clean Water Act Section 404 Permit.

B. AFFECTED ENVIRONMENT

Exhibit S-1 shows the project area. The affected environment encompasses a variety of features, including communities, agricultural resources, cultural resources, and natural resources. These are described briefly below and in detail in Chapter II.

Social/Economic

The City of Macomb is the largest city within McDonough County (18,558 in 2000). It contained 56 percent of the total population of McDonough County. In 2000, 5,823 persons lived in the rural census block groups containing the project corridor. Almost all were White with a higher median family income (1999) and a higher percent of persons 65 and over (2000) than the County as a whole.

Major economic influences for the City of Macomb and McDonough County include agriculture and Western Illinois University. Macomb's status as the county seat of government and its location at the crossroads of major highways and railroads are factors in the City's economy. The total number of full and part-time employees in McDonough County was 15,934 in 2000.

The project corridor traverses a primarily rural area. The predominant land use is agricultural. Six subdivisions on the west, two other residential clusters on the north, and a concentration of industrial businesses and a group of automobile retailers on the east are near the corridor. No public facilities or community services facilities are within the project corridor.

The City of Macomb's Comprehensive Plan and McDonough County's Overall Economic Development Program identify the completion of the highway system network as essential to the economic growth in the surrounding region. McDonough County and the City of Macomb have taken several measures to foster economic development within the City and County.

Agricultural

The primary land use in McDonough County is agricultural. More than 90 percent of the total land area of this County, or 137,680 hectares (340,035) acres), is in farm or farm-related usage.

According to the National Resources Conservation Service, there are approximately 110,016 hectares (271,711 acres) of prime farmland in McDonough County. This represents approximately 72 percent of the total land area in this county.

Cultural

Three homes were identified in the project's corridor as potentially eligible for inclusion in the National Register of Historic Places; however, none of these properties will be affected by the proposed project. The proposed project will have no effect, direct or indirect, on historic resources listed on or eligible for inclusion in the National Register. A survey documented the presence of 60 archaeological sites and 25 find spots or isolates.

Air Quality

No portion of this project is within a designated non-attainment area.

Natural Resources

The majority of the project area is in flat to gently rolling agricultural land planted in row crops and pasture. An existing system of primary and secondary roads, scattered farmsteads, and rural residential development dissects this rural landscape. Extensive corridors of upland and bottomland forest follow the East Fork of the La Moine River. Deeply incised drainage channels form a network of wooded ravines draining toward the river system. Localized areas of wetlands, ponds, early successional forest, and hill prairie are found throughout the corridor.

The US Fish and Wildlife Service "Redbook" of endangered and threatened species lists the Indiana bat *(Myotis* sodalis), prairie bush clover (*Lespedeza leptostachya*), Mead's milkweed (*Asclepias meadii*), and eastern prairie fringed orchid (*Platanthera leucophea*) as potentially occurring in McDonough County. The proposed project, however, would not affect these species.

The Illinois Endangered Species Protection Board lists several species as occurring in McDonough and adjacent counties. The Illinois Department of Natural Resources Natural Heritage Database (IDNR Agency Action Report dated August 27, 1996) indicates the presence of loggerhead shrike (*Lanius ludovicianus*) and bunch flower (*Melanthium virginicum*) as occurring in the project area. In addition, field observations indicate the presence of brown creeper (*Certhia americana*), sandhill crane (*Grus canadensis*), northern harrier (*Circus cyaneus*), and Hill's thistle (*Cirsium hilli*). Local observations include Henslow's sparrow (*Ammodramus henslowii*), red-shouldered hawk (*Buteo lineatus*), and bald eagle (*Haliaeetus leucocephalus*). Only Henslow's sparrow could be affected by the proposed project.

Water Quality/Resources

The project area is contained within the La Moine River Basin, part of the overall Illinois River drainage system. The East Fork of the La Moine River flows through a relatively wide valley and has a well-developed floodplain. The remainder of the streams in the basin flow in relatively narrow valleys that preclude the development of wide bottomland floodplains. Spring Lake is located northwest of Macomb. The project area does not contain any natural lakes, but has numerous man-made impoundments. These include small stock watering ponds in farm pastures created by excavation and/or damming small drainageways.

Spring Lake serves as a pubic water supply reservoir for the City of Macomb and Western Illinois University. Most communities in the county supplement surface water supplies with several sand and gravel aquifer wells. Domestic water supplies draw from the Keokuk-Burlington (K-B) limestone. There are no sole source aquifers in Illinois. No regulated groundwater recharge areas are within the project corridor. The project corridor passes within a

portion of the well-head protection area of one private well and one public well serving a mobile home park.

In general, water quality in the surficial gravel/sand lenses and in the K-B formation is good. Overall water quality in the East Fork of the La Moine River is good, although upland agricultural practices and wastewater discharges in Colchester and Macomb very likely influence water quality.

Flood Plains

Base floodplains in the project area are associated with the East Fork La Moine River and Spring Creek. The natural and beneficial values of the floodplains in the project corridor include: natural moderation of floods, wooded wildlife habitat, agriculture, and wetlands. The floodplains also reduce sedimentation, filter nutrients and impurities from overland runoff, and promote infiltration and groundwater recharge. There are no regulatory floodways in the project corridor.

Wetlands

Thirty-three wetlands were identified in the project corridor. These wetlands include ponds, wet meadows, floodplain forest, seeps, wet shrublands, pond/wet meadows, and wet meadow/marshes.

Hazardous and Non-Hazardous Wastes

Surveys identified several past and present underground storage tank sites in the project area. There are no Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites in the project right-of-way. Because of their age, some of the buildings in the project area could contain friable asbestos.

C. ALTERNATIVES CONSIDERED

The alternatives presented for evaluation in this document are a result of alignment alternative studies conducted from 1994 to 2003. The objective of these studies was to identify a preferred Macomb bypass alignment or alignments within a Northwest/ Northeast Corridor combination or a South/Northeast Corridor combination. Natural resource agencies, agricultural resource agencies, local officials, and the public contributed to the decision-making process.

The No-Action Alternative would maintain existing roads within the Macomb area and would encompass only routine maintenance and selective highway improvements. It would not meet the purpose and need of the proposed project. Neither a regional or local bus transit system would meet the project's purpose and need. Existing US 67 and US 136 are four lane roads for almost their entire lengths through the City of Macomb. Additional widening of the existing roads would not meet most of the objectives of the proposed project.

The IDOT, in association with natural resource agencies and with the support of local officials, dropped alignments in the South Corridor from further consideration in 1998. The IDOT found that a bypass in the South Corridor was 50 percent longer and 50 percent more expensive to construct than in the Northwest Corridor. Farm parcel, right-of-way, and agricultural impacts associated with any of the South Corridor alternatives would be 50 to 100 percent greater than for the Northwest Corridor. A combined Northwest Corridor and Northeast Corridor bypass would better serve traffic. The IDOT considered numerous potential alignments in the Northwest and Northeast Corridors.

The IDOT proposes a four-lane freeway as the preferred alternative. Exhibit S-2 illustrates the location of the preferred alternative. The project would include full control of access. With full access control, access to and from a road is limited to interchanges with selected public highways. The preferred alternative would include interchanges of US 136 west of Macomb, US 67 north of Macomb, and relocated US 136 east of Macomb. The preferred alternative would cost approximately $148.4 million (year 2000 dollars), including $2.3 million to purchase the right-of-way and land-locked parcels. The amount of right-of-way and land-locked parcels purchased would be approximately 285.7 hectares (706.0 acres).

The preferred alternative best meets the purpose and need for the project while resulting in the most reasonable combination of community, natural resource, agricultural, and cultural resource impacts.

Chapter III describes the preferred alternative and the decisions that led to its selection.

D. ENVIRONMENTAL CONSEQUENCES

The following paragraphs summarize the potential social, cultural resource, and natural resource impacts of the proposed highway. These impacts are described in detail in Chapter IV.

Social/Economic

The proposed highway would pass through a primarily rural area. As such, it will not sever or pass through any subdivisions or urban neighborhoods. The project would affect individual or smaller clusters of homes and agricultural operations.

There are no concentrations of low-income households or any minority group within the project corridor. There are higher concentrations of the elderly in the corridor than McDonough County as a whole. The project would retain existing rural circulation routes. Thus, it would not affect travel routes to schools, churches, parks, hospitals, shopping, and community services.

Seven residential and one business relocation would result from the proposed highway. The project would not affect any community facilities or services. Construction of the proposed highway would require the relocation of some utilities in the project area.

To the extent that the proposed highway serves as a catalyst to attract new industrial employers and their employees to the area, it could have a positive influence on the economic base of the area. In addition, traffic volumes on US 67 and US 136 through Macomb are expected to continue to increase even with the completion of the proposed highway (for example, the ADT on US 136 west of downtown is projected to increase from 12,800 vpd in 2000 to 17,400 vpd in 2025 even with the proposed highway). Thus, travel pattern changes resulting from the proposed highway are not expected to affect substantially the existing downtown business community. The proposed highway could accelerate current development trends. It would support current land use plans and economic development strategies for the area. Construction of the proposed highway would result in the creation of temporary construction-related jobs. Purchase of the right-of-way for the project would temporarily reduce tax revenues in the project area's taxing districts on average, by less than one percent. The highest single reduction would be 3.07 percent and the lowest 0.01 percent.

Agriculture

Construction of the proposed highway would require 286 hectares (706 acres) of farmland. There will be severance management zones totaling 35.1 hectares (86.7 acres) created on 33

farms. In addition to land actually needed for the roadway itself, 47.7 hectares (117.9 acres) of agricultural land would be land-locked and 3.6 hectares (8.8 acres) would become uneconomic remnants. An estimated $163,037 in annual agricultural income would be lost if the proposed highway were constructed. This represents 0.2 percent of the total value of products sold in McDonough County.

The proposed highway would bisect 24 farm units, either laterally or diagonally, thereby dividing a parcel of land into two or more individual plots. Seven farm units would experience adverse travel with construction of the proposed highway.

Several management and design practices were and would continue to be incorporated into the proposed highway to help minimize disruptions to agricultural activities and help limit adverse impacts to designated soils.

The proposed alignment would use land from all of the four centennial farms in the project corridor. One farmstead would be displaced. Three centennial farms would be severed and severance management zones would be created on all four farms. Adverse travel impacts would occur for two centennial farms.

Cultural Resources

The proposed highway would have no effect, direct or indirect, on historic resources listed on or eligible for inclusion in the National Register of Historic Places.

Air Quality and Noise

A Pre-Screen analysis was completed for the proposed project. The results from this analysis indicated that a full screening analysis using the Illinois Carbon Monoxide Screen for Intersection Modeling (COSIM) was not required, as the results for the worst-case receptor were below the eight-hour average National Ambient Air Quality Standard (NAAQS) for CO of 9.0 parts per million (ppm) that is necessary to protect the public health and welfare.

At 15 homes, noise levels would approach or exceed the Federal Highway Administration's Noise Abatement Criteria and/or would be substantially higher than current levels. Abatement studies found that available options for reducing noise levels at these homes are not feasible and/or economically reasonable. There is a berm included in the project design across Deer Ridge Lake (the man-made lake on the west side of the project; however, an additional noise barrier would be required on top of this berm in order to provide effective noise abatement for future homes along the lake to the east of the proposed project.

Natural Resources

The proposed highway would convert 264.8 hectares (654.3 acres) from one cover type to another. For plant communities such as cropland (agricultural land), hayfields, pasture, non-native grassland, and developed land, a reduction in ground cover would represent a minor impact because these cover types are relatively common outside the proposed right-of-way or could be readily replaced. The loss of woody plant communities (i.e., forest, shrubland, and fencerow), prairie, and wetlands would constitute a greater resource loss.

Direct adverse impacts to terrestrial wildlife would occur principally through the removal or significant modification of habitat within the proposed roadway right-of-way. The proposed alignment would remove approximately 30.7 hectares (75.9 acres) of upland forest and 6.8 hectares (16.9 acres) of floodplain forest. Approximately 12.8 hectares (31.6 acres) of grassland habitat would be affected. In addition, 1.5 hectares (3.6 acres) of fencerow habitat would be lost.

Highways present a barrier to wildlife movement causing a hazard to animals and motorists. Steps were taken to minimize disruption to existing wildlife corridors and fragmentation of habitat during the selection of the proposed alignment. A series of wildlife underpasses are proposed as part of the proposed highway to mitigate the severance of wildlife corridors.

The state threatened Henslow's sparrow is present in the project area. The proposed project would not affect this bird.

The proposed highway would include mitigation for wildlife habitat loss through minimization of habitat loss, as well as habitat creation. Early mitigation planning indicates that through plantings in the right-of-way and on additional lands purchased the following habitat loss mitigation would occur:

- 35.5 hectares (87.6 acres) – prairie restoration.
- 17.0 hectares (41.0 acres) – forest restoration.
- 61.4 hectares (151.5 acres) – upland forest protected from grazing and development.
- 14.0 hectares (34.8 acres) – floodplain forest protected from grazing and development.
- 1.3 hectares (3.2 acres) – wetland protected from grazing and development.

Water Quality/Resources

The construction, operation, and maintenance of the proposed highway would potentially affect surface water quality in several ways. Short-term construction impacts could result from erosion and siltation generated during clearing, excavation and filling activities. Long-term operation and maintenance could affect surface water quality through the runoff of deicing chemicals and traffic related pollutants such as oils, greases, rubber, etc., generated by vehicular traffic. The proposed highway would have minimal impacts to groundwater quality.

Flood Plains

Construction of the proposed highway would result in three floodplain encroachments. The construction of the proposed highway would cause a minimal increase in flood heights and flood limits that would not be substantial.

Wetlands

The proposed alignment would affect five wetlands. The total wetland loss would be 1.04 hectare (2.55 acres), including 0.55 hectare (1.34 acres) of palustrine emergent wetland, and 0.49 hectare (1.22.acres) of palustrine forested wetland. There are no practicable alternatives to the proposed construction in wetlands. In addition, the proposed alignment includes all practicable measures to minimize harm to wetlands that could result from such use. The IDOT would compensate for wetland impacts through development of both forested and non-forested wetlands. A minimum of 4.0 hectares (10.0 acres) of wetland compensation would be required. Wetland impacts would be compensated through the development of both forested and non-forested wetlands.

Hazardous and Non-Hazardous Wastes

The proposed highway would neither involve nor affect a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site. Two sites affected by the proposed highway involve petroleum contamination from leaking underground storage tanks. Any contaminated areas disturbed by construction that exceed residential levels would be managed and disposed of in accordance with applicable Federal and State laws and regulations and in a manner that would protect human health and the environment.

Visual Impacts

Construction of the proposed highway would affect views from 39 residences, a planned lakefront subdivision, and a prairie restoration area. The project would be a new visual feature for homes near the proposed highway at 1250N/Adams Street, Deer Ridge Lake and planned subdivision, Tower Road, US 67 (north of Macomb), Bower Road/1400E, 1400N, and the BNSF Railroad and University Drive/1300N.

Secondary and Cumulative Impacts

The proposed highway would support area development goals. Expected and induced growth that could occur in the Macomb area is considered a benefit to the community. New residential development occurs and is expected to continue to occur in the predominantly wooded areas west of Macomb. The potential for secondary impacts to sensitive or unique communities would be greatest there. Development is also expected to occur in areas designated for industrial and commercial development near the US 136/US 67 interchange on the east side of Macomb.

Construction Impacts

During the construction phase of the proposed project, the potential exists for short-term adverse impacts from construction equipment and activities, including agricultural, public service, noise, water quality, and wetland impacts. To mitigate those effects, the contractor will be required to adhere to the latest edition of the *Standard Specifications for Road and Bridge Construction* and IDOT's *Standard Specifications for Erosion and Sediment Control*.

Mitigation Measures

Section 101(b) of the National Environmental Policy Act (NEPA), requires that federal agencies incorporate into their project planning all practicable measures to mitigate adverse environmental impacts resulting from a proposed action. Specific mitigation commitments are proposed to mitigate agricultural, upland habitat, wildlife travel corridor, threatened and endangered species, and wetland impacts. Final mitigation plans would be incorporated into final engineering plans and specifications prepared for the proposed highway.

E. OTHER PROPOSED ACTIONS

Construction of the proposed project would provide the final link to the other four-lane expressway improvements that are existing, under construction, or proposed in west central Illinois. Those improvements under construction or proposed are:

- US 34 from Monmouth to Gulfport – sections of this corridor are in various stages of planning and design in the IDOT five-year funding program.

- US 67 from Alton to south of Macomb – US 67 bypass completed on new location to the west of Jacksonville between existing US 67 and I-72, completion scheduled for 2004 of extension of this bypass from I-72 south to existing US 67 near Manchester, improvements to US 67 from Manchester south to Alton to be constructed in sections as funding becomes available, and design approval for four-lane US 67 expressway from Jacksonville north to Macomb granted in early 2003.

- IL 336 (Federal Aid Primary [FAP] 302) from Quincy to Carthage – section from Quincy to north of IL 94 is completed, section from north of IL 94 to south of Carthage is under construction (completion scheduled for late 2003).

- IL 336 (FAP 315) from Carthage to Macomb – four-lane expressway from south of Carthage to the west edge of Macomb is currently under design (Record of Decision was signed in December 1999).

- IL 336 from Peoria to Macomb – Phase I planning is currently underway.

Improvements from Quincy to Peoria are referred to as the F-7 Supplemental Freeway Program. Improvements from Alton to Monmouth are referred to at the F-13 Supplemental Freeway Program. These improvements will complete the connection of west central Illinois to the interstate system at Galesburg, as well as provide connections to major population centers in west central Illinois and Iowa.

F. AREAS OF CONTROVERSY

At present, there are no areas of controversy.

G. MAJOR UNRESOLVED ISSUES WITH OTHER AGENCIES

There are no major unresolved issues with other agencies.

H. OTHER FEDERAL ACTIONS REQUIRED FOR THE PROPOSED ACTION

A Corps of Engineers Section 404 permit and accompanying Section 401 certification would be required for water resource impacts at seven locations along the proposed highway. A National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges from the construction sites would be needed.